Minimalizing Bullying at SD Negeri Karangwaru 2 Sragen by *Stop Bullying* Application

Romario Seger Aji Pamungkas and Sutama[✉]

Faculty of Teacher Training Education, Universitas Muhammdiyah Surakarta, Surakarta, Indonesia
sutama@ums.ac.id

Abstract. Bullying dangers the development of children. Educational efforts to prevent and minimize bullying are significant. This research aims to describe the process of implementing the Stop Bullying application and show a reduction in bullying at SDN Karangwaru 2. This research was a qualitative type with an ethnographic approach. The research was conducted at SDN Karangwaru in the village of Karangwaru, Plupuh, Sragen, Central Java, in the 2022/2023 school year. The subjects of this study were fifth-grade elementary school students, the fifth-grade teacher, and the principal. Data was collected through interviews, observation, documentation, and scoring rubrics. The validity of the data was tested by triangulation of sources and techniques. The data analysis technique was inductive, starting with specific facts and producing generalizations in general statements. This study's results are: 1) Using the Stop Bullying application is carried out through the preliminary, core, and closing stages. 2) There is a decrease in students' bullying tendencies based on observations using a rubric with indicators of bullying after using the application. The average score of students' bullying tendencies before and after the application is 2.615 decreasing to 2.333. After using the Stop Bullying application, students care more about their friends and remind them when bullying occurs at school.

Keywords: stop bullying application · bullying · elementary school

1   Introduction

Education is a means to improve all aspects of life [1]. Education is expected to shape students' behavior and character in a positive direction [2]. Education requires good management to create generations capable of dealing with various problems and challenges in life [3]. Education plays a role in developing students' cognitive and affective abilities. Education can shape individuals not only from the cognitive aspect but also from the affective aspect [4]. One of the affective aspects developed in education is mutual appreciation and respect. The problems in the world of education experienced by students are very diverse, one of which is bullying.

Bullying is repetitive power abuse through physical, verbal, and/or social behavior, causing psychological and physical harm [5]. The National Commission for Child Protection (KPAI) received approximately 26 thousand case reports regarding bullying from 2011 to 2017 [6]. This number aligns with the Children's Worlds survey results showing that 52.5% of elementary school children experienced physical bullying and 60.6% experienced verbal bullying. [7]. One of the effects of physical bullying experienced by elementary school students in Kediri is brain infection [8]. Based on data from UNESCO in 2018, 16.1% of children from 144 countries have experienced physical bullying [9].

Bullying also harms children's social-emotional skills [10]. Bullying makes it difficult for children to interact with others [11]. Children tend not to talk about the bullying they are experiencing. The reason may be the personality of introverted children who tend to keep their problems to themselves. It is consistent with research that explains that introverted children are more often bullied than children with extroverted personalities [12]. Children who are victims of bullying have a lower state of happiness than those who are not [13]. Not a few children who are bullying victims choose to commit suicide because of the trauma they have experienced [14]. One of the factors that cause bullying is those elementary school-age children tend to be difficult to manage, easily emotional, high on egoism, and sometimes they do not understand that what they do can hurt other people's feelings [15]. The family, community, and school environment can cause children to bully [16]. Parenting styles that are authoritarian or that are too free can also cause children to engage in violent behavior, such as bullying [17]. Students who have bad social circles or are friends with bullies will tend to imitate the behavior of their friends [18]. In addition to internal factors, family and friends, schools that do not provide education regarding character building, the teacher's lack of attention to students' behavior, and the absence of clear school rules lead to the potential for bullying to occur in schools [19].

Learning media is one of the educational steps to prevent and reduce bullying in students. Learning media such as animation will increase students' attention to follow and understand learning [20]. Previous research on using media to reduce bullying is entitled "Development of Comic Media to Prevent Bullying Behavior in Grade Seven Students" [21]. The results of this study show that comic media interests students to be aware of the adverse effects of bullying to minimize bullying. Similar research titled "Information Services with Puzzle Media to Reduce Student Bullying Behavior" shows that puzzle media can reduce student bullying [22]. Puzzle media also provides innovative learning to students so they do not get bored quickly. Other research regarding media use titled "Photovoice Media to Reduce Bullying in Grade Eight Students at MTs Negeri 1 Cirebon City" shows that photovoice media can influence students' mindsets and attitudes. Photovoice acts as psychotherapy to trigger changes in student mindsets and change student behavior not to bully [23]. However, the presentation of the three studies has not been able to answer and solve the problem optimally.

Our alternative solution is "Minimizing bullying at SD Negeri Karangwaru 2 Sragen through the Stop Bullying Application". The media application developed is based on Android and has video animations of fairy tales and bullying types and their effects with attractive designs. There are educational games and quizzes to test students' understanding of bullying issues. Previous studies did not explain what aspects would be the focus,

so we tried to focus on affective and cognitive aspects. The cognitive aspect is developed by giving students an understanding of the definition of bullying, its types, impacts, and prevention through video content, games, and quizzes in the Stop Bullying application. The affective aspect fosters awareness and empathy for mutual respect, one of which is through the jargon on the front page of the application, "Respect fellow Indonesian children's cultures." Even though this application is based on Android, this application is accessible on a laptop or computer. Another advantage of the Stop Bullying application is its report feature to report bullying incidents to teachers or the school so they can be dealt with immediately. This research aims to describe the process of implementing the Stop Bullying application and show a reduction in bullying at SDN Karangwaru 2.

2 Method

This research was a qualitative type with an ethnographic approach. Qualitative research aims to comprehensively understand human and social phenomena and then present them in descriptive words containing data from informants in a scientific setting [24]. The ethnographic approach seeks to explain humans and their behavior individually and in groups [25]. Ethnography aims to describe a community group's behavior, values, language, and beliefs in writing [26]. The research was conducted at SDN Karangwaru in the village of Karangwaru, Plupuh, Sragen, Central Java, in the 2022/2023 school year. The subjects of this study were eight male and five female fifth-grade elementary school students, the fifth-grade teacher, and the principal. Data was collected through interviews, observation, documentation, and scoring rubrics. Interviews were conducted with fifth-grade teachers and school principals as informants to obtain data. Observations were made by observing students' behavior during activities at school. Documentation was seen based on the attitude score report in the previous semester. The scoring rubric contains bullying indicators assessed based on questionnaires and observations by researchers before and after the Stop Bullying application implementation process. Observations with an assessment rubric were made before and after using the Stop Bullying application to measure students' bullying tendencies.

There are three types of bullying: physical, verbal, and psychological [27]. Physical bullying is hitting, pinching, kicking, shifting someone's chair when they want to sit, and slapping. Verbal bullying is by calling using animals' names, using racist names, insulting, yelling, and making satire. Meanwhile, psychological bullying isolates and encourages others not to befriend the victim [28]. Based on the description of the indicators, an assessment rubric was created to see students' bullying tendencies. The researchers gave an assessment score for each item in 1 (one) to 4 (four). This value indicates the level of frequency of bullying. The higher the frequency, the more bullying occurs among students (Table 1).

Each score has a different weight. A statement in an item will be scored according to the following details.

1 = Never been bullied in the last two months.
2 = Been bullied 1–2 times in the last two months.
3 = Been bullied 3–5 times in the last two months.
4 = Been bullied more than five times in the last two months.

Table 1. Bullying Tendency Assessment Rubric

Bullying Indicator	Number of Items
Physical Bullying	4
Verbal Bullying	3
Psychological Bullying	3

Table 2. Bullying Tendency Assessment Scale

Category	Score	Scale
Always	4	3,26–4,00
Often	3	2,51–3,25
Sometimes	2	1,76–2,50
Never	1	1,00–1,75

The final score is obtained from the sum of each answer according to categories 1 (one) to 4 (four). The following formula obtains the interval.

$$\text{Interval} = \frac{\text{Maximum Score} - \text{Minimum Score}}{\text{Number of Categories}}$$

$$\text{Interval} = \frac{4 - 1}{4}$$

$$\text{Interval} = 0,75$$

According to the results, each category has an interval of 0.75.

This score is taken from direct observation. Furthermore, in-depth interviews were conducted, and the archives of attitude scores documents owned by the school were observed. The average scores were calculated to see if there was a decrease before and after using the Stop Bullying application. The validity of the data was tested by triangulation of sources and techniques. Source triangulation is obtaining data from multiple subjects, such as students, teachers, and school principals. Technique triangulation is obtaining data with various techniques such as interviews, rubrics, and observations. The data analysis technique is inductive, starting with specific facts and producing generalizations in general statements (Table 2).

3   Results and Discussion

The first result of the research is the process of using the Stop Bullying application for 13 fifth-grade students at SDN Karangwaru 2, consisting of 9 boys and 4 girls. Before implementing the Stop Bullying application, the researchers conducted interviews with

school principals and teachers first. Students' behaviors at school were also observed first using the developed assessment rubric. The Stop Bullying application is utilized in three stages: preliminary, core, and closing. The Stop Bullying application was implemented for approximately 2 h by encouraging students to bring their devices with the teacher's and parent's permission. For students who do not have gadgets, researchers provide laptops so students can use the Stop Bullying application with other friends. One of the advantages of this application is that it can be used on laptops and devices with Android OS. The size of this application is not too big, only 20 megabytes.

3.1 Preliminary Stage

There are several processes in the preliminary stage:

Conditioning Students

Students are conditioned by explaining the purpose of using media. The day before, students were asked to bring their Android devices to download the Stop Bullying application. This application does not require an internet connection, so students do not have trouble setting up data or wi-fi.

Apperception

Apperception is done by asking students if they have ever experienced painful behavior, such as being insulted, humiliated, or beaten by other people.

Explaining Application Features

The researchers explain how to use the application and the application content, such as animated videos, materials, games, and the report bullying feature. This feature increases school control over students' behavior because bullying continuously occurs due to the lack of control from the school. A positive school environment and school control will reduce bullying [29].

3.2 Core Stage

Students are ready to use the application and understand all the instructions given in the preliminary stage. There are several steps in the core stage.

Accessing Material

Students are first directed to access materials regarding the definition of bullying, its types, ways to prevent it, its effects, and what to do if someone gets bullied. The material is accompanied by an application so that students are not easily bored and are more interested in listening to the material.

Watching Video

Students are directed to the video menu containing a story about a child being bullied. It is hoped that the story can build student empathy so they will not bully. Explanation of material through stories will make children more interested and happier with the material presented to form character in children [30].

Playing Games

This application also has puzzle games about the material being explained so that students understand more. The Stop Bullying application that utilizes various media such as videos, images, and audio will make it easier for students to remember the ideas and

concepts of the messages conveyed [31]. Puzzle games can reduce bullying by providing education to them [22].

Report Bullying Feature

Students are told how to report bullying incidents through the application by clicking the report button. Students will be directed to the Google Form to fill in the identity and chronology of the bullying incident.

3.3 Closing Stage

Closing is divided into doing quizzes and inviting students to conclude applying the application.

Doing Quizzes

Students take quizzes in the application to check their understanding of the studied material.

Concluding

The researchers asked about the conclusions of the material learned from the application. Questions in the form of "Why can't students bully? " How should we behave if we see a friend experiencing bullying?" and other questions.

The process of using the Stop Bullying application is carried out for approximately two hours in the classroom. Students look enthusiastic because the Stop Bullying application does not only contain material but also story videos and puzzle games. Students do not experience technical problems because the application is easy to use without internet network interference.

The second result is a decreased bullying tendency of fifth-grade students at SDN Karangwaru 2. The researcher measured the students' bullying tendencies based on the assessment rubric containing ten items of physical, verbal, and psychological bullying indicators with an assessment scale of 1– 4.

Based on Table 3, the average score of physical bullying tendencies after the application dropped to 2.385 from 2.615. Physical bullying by students includes hitting, pinching, grabbing, pushing, and pulling chairs when friends want to sit down.

Table 3. Results of Physical Bullying Tendency Assessment Rubric

Physical Bullying	Mean	Standard Deviation
Before	2,615	0.506
After	2,385	0,96

Table 4. Results of Verbal Bullying Tendency Assessment Rubric

Verbal bullying	Mean	Standard Deviation
Before	3,154	0,688
After	2,769	0,438

Based on Table 4, the average score of verbal bullying tendencies after the application dropped to 2,769 from 3,154. Based on interviews with teachers and principals and direct observations of student activities at school, students often engage in verbal bullying, such as making fun of friends, calling friends by their parents' names, and insulting friends for making mistakes. Verbal bullying is hurting feelings with verbal language. A lack of knowledge or education about good attitudes and character will cause students to bully verbally [32]. Students at SDN Karangwaru 2 have not held socialization or coaching regarding the effects of bullying. Therefore, the Stop Bullying application can be a bridge for educating students that bullying is a disgraceful behavior that hurts oneself and others.

Based on Table 5, the average score of physical bullying tendencies after the application dropped to 1,846 from 2,077. Psychological bullying includes circles that isolate and stay away from students who are hostile to one of these circles.

Based on Table 6, the average score of every indicator of bullying tendencies after the application dropped to 2,333 from 2,615. The average verbal bullying tendency was the highest, followed by physical and psychological bullying. Based on the results of this study, the Android-based Stop Bullying application can be used to educate students to reduce bullying tendencies. Android-based media with a reporting system for bullying is considered effective in preventing and minimizing bullying [33].

The Stop Bullying application minimizes bullying by raising awareness that bullying is a disgraceful behavior that has a negative impact. After students realize that bullying is a mistake, this application also tries to foster empathy so that students respect and love each other more. Increased empathy will prevent students from behaving negatively [34]. Bullying does not only have an impact on victims but also on perpetrators. Bullies have difficulties in academics, anxiety, jealousy, and depression [35]. Bullying has three characteristics: it tends to hurt someone, it is done repeatedly, and the perpetrator looks for victims who are considered weak and do not dare to fight back [36].

Table 5. Results of Psychological Bullying Tendency Assessment Rubric

Psychological Bullying	Mean	Standard Deviation
Before	2,077	0,277
After	1,846	0,554

Table 6. Results of Bullying Tendency Assessment Rubric

Indicator	Mean Before Application Use	Mean After Application Use
Physical Bullying	2,615	2,385
Verbal Bullying	3,154	2,769
Psychological Bullying	2,077	1,846
Mean	2,615	2.333

4   Conclusion

Using the Stop Bullying application to reduce fifth-grade bullying at SD Negeri Karang-waru 2 Sragen is carried out through three stages: the preliminary, core, and closing. The preliminary stage is the stage of preparing the tools, explaining the use of the application, and apperception to students. The core stage includes using the Stop Bullying application with materials from understanding to prevention, videos, puzzle games, and quizzes to test student understanding. In addition, there is an explanation regarding the report feature, which can be used to report or send complaints to the school if someone experience or see bullying. The closing stage is strengthening the material and conclusions. There are three indicators of bullying: verbal, physical, and psychological. The average score of students' bullying tendencies before and after the application is 2.615 decreasing to 2.333. This decrease indicates that the Stop Bullying application can minimize bullying. After using the Stop Bullying application, students care more about their friends and remind them when bullying occurs at school.

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